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EXAMINER
DANIEL JR, WILLIE J

ART UNIT	PAPER NUMBER
2617	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/083,895

Applicant(s)

BAI, ZHONGZE

Examiner

Willie J. Daniel, Jr.

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment filed on 19 December 2006. **Claims 30-58** are now pending in the present application and **claims 1-29** are canceled. This office action is made **Final**.

Claim Objections

2. **Claims 42, 47-49, and 57** are objected to because of the following informalities:
 - a. **Claims 42 and 47-49** includes the limitation "...The **system** of..." as recited in line(s) 1 of claim 42. The Examiner interprets as --The **tracking unit** of-- and suggests that applicant clarify the claim language.
 - b. **Claim 57** recites the limitation "...The **apparatus** of..." in line(s) 1 of the claim. The Examiner interprets as --The **tracking unit** of-- and suggests that applicant clarify the claim language.

Appropriate correction is required.

3. **Claim 58** is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim 58 is not been further treated on the merits.
4. This list of examples is not intended to be exhaustive. The Examiner respectfully requests the applicant to review all claims and clarify the issues as listed above as well as any other issue(s) that are not listed.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 43-46 and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding **claims 43-46 and 58**, the claims are directed to neither a “process” nor a “machine”, but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only.

See MPEP § 2173.05(p)(II). [A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. In *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990), a claim directed to an automatic transmission workstand and the method steps of using it was held to be ambiguous and properly rejected under 35 U.S.C. 112, second paragraph.]

6. This list of examples is not intended to be exhaustive. The Examiner respectfully requests the applicant to review all claims and clarify the issues as listed above as well as any other issue(s) that are not listed.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30-50 and 53-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Takahashi et al.** (hereafter Takahashi) (**US 6,097,313**) in view of **Azizi et al.** (hereinafter Azizi) (**US 5,525,967**).

Regarding **claims 30, 41, and 50**, Takahashi discloses an apparatus, a tracking unit, and a method of finding a target object (e.g., service provider 0101, 0301, 0514) utilizing a vehicle-mounted unit (0201) which reads on the claimed "tracking unit" (see Figs. 1 and 5), comprising:

receiving a first identification code (e.g., information kind/item 1412,11) which said tracking unit (0201) pre-selected to represent a first target object (e.g., service provider 0101, 0301, 0514), wherein said first identification code is a unique code utilized to identify said first target object (see col. 11, lines 36-42; col. 8, lines 29-35; col. 14, lines 22-26,4-62; Figs. 1, 3-7, and 15A-D), where the driver selects the preferred service content provided by the service providers;

receiving a plurality of wireless signals (e.g., beacon) broadcasted from a plurality of objects within a predefined range, wherein said plurality of wireless signals are repeatedly broadcasted over a predetermined time frame within said predefined range (see col. 10, lines 61-67; col. 8, lines 29-35; Figs. 4, 8-9);

identifying a first wireless signal from said plurality of wireless signals in response to said first identification code (see col. 11, lines 36-42; col. 8, lines 29-35; Figs. 1, 3-7, and 15A-D); and

estimating a first distance and a first bearing directly on location of said first wireless signal source, wherein said estimating a first distance includes calculating a distance between said tracking unit and said first target object (see col. 28, lines 16-25; col. 19, lines 33-40; Figs. 5 and 15C-D), where the navigation system displays the mapping information and uses a position sensing device such as a gyroscope to determine the position of the vehicle-mounted unit (0201) relative to the service provider which is visual via graphical display of a map in which the bearing would be inherent as evidenced by the fact that one of ordinary skill in the art would clearly recognize. As a note, Takahashi further teaches of receiving a beacon (see col. 8, lines 13-16; col. 9, lines 22-25), where the service providers are varied based distance as provided by beacon signal (e.g., RSSI or strength). Takahashi does not specifically disclose having the feature estimating a first distance and a first bearing directly on strength and location of said first wireless signal source. However, the examiner maintains that the feature estimating a first distance and a first bearing directly on strength and location of said first wireless signal source was well known in the art, as taught by Azizi.

In the same field of endeavor, Azizi discloses the feature estimating a first distance and a first bearing directly on strength and location of said first wireless signal source (see col. 4, lines 45-53; Figs. 1-2). As a note, Azizi further discloses wherein said estimating a first distance includes calculating a distance between said tracking unit and said first target object (see col. 4, lines 45-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takahashi and Azizi to have the features estimating a first distance and a first bearing directly on strength and location of said first wireless signal source, in order to employ technology that combines the capability of determining accurately both the distance and the direction of an individual or object being monitored relative to the transmission or monitoring point, and achieve this at a relatively low cost, as taught by Azizi (see col. 2, lines 3-9).

Regarding **claim 31**, the combination of Takahashi and Azizi discloses every limitation claimed, as applied above (see claim 30), in addition Takahashi further discloses the method of claim 30, further comprising displaying said first distance and said first bearing on a display (see col. 14, lines 37-39; col. 20, lines 36-57; Figs. 15C-D), where the navigation system displays the mapping information in which the bearing would be inherent as evidenced by the fact that one of ordinary skill in the art would clearly recognize.

Regarding **claims 32 and 43-46**, the combination of Takahashi and Azizi discloses every limitation claimed, as applied above (see claim 31), in addition Takahashi further discloses the method of claim 31, further comprising:

continuing to receive subsequent sets of wireless signals broadcasted from said plurality of objects within said predefined range (see col. 28, lines 16-25; col. 14, lines 37-39; col. 11, lines 17-35; col. 13, lines 7-17; col. 13, line 59 - col. 14, line 9; Figs. 15A-D), where the navigation system checks the information for the destination (i.e., service provider) in which the navigation system uses a position sensing device such as a gyroscope (i.e., an alternative

device instead of using GPS) to determine the position of the vehicle-mounted unit (0201) relative to the service provider which is visual via graphical display of a map;

identifying subsequent first wireless signal from said subsequent sets of wireless signals in response to said first identification code (see col. 14, lines 37-39; col. 20, lines 36-57; Figs. 15C-D), where the navigation system displays the mapping information;

updating said first distance and said first bearing in response to said subsequent first wireless signal (see col. 14, lines 37-39; col. 20, lines 16-22, 43-45, 52-58; col. 28, lines 16-25; Figs. 15C-D), where the navigation system displays the mapping and distance; and

redisplaying updated said first distance and said first bearing on said display (see col. 14, lines 37-39; col. 20, lines 16-22, 43-45, 52-58; col. 28, lines 16-25; Figs. 15C-D), where the navigation system displays the mapping and distance.

Regarding **claims 33, 47-49, and 53**, Takahashi discloses the method of claim 30, further comprising:

receiving a second identification code representing a second target object from said code input device (see col. 28, lines 16-25; col. 14, lines 37-39; col. 11, lines 17-35; col. 13, lines 7-17; col. 13, line 59 - col. 14, line 9; Figs. 15A-D), where the navigation system checks the information for the destination (i.e., service provider) in which the navigation system uses a position sensing device such as a gyroscope (i.e., an alternative device instead of using GPS) to determine the position of the vehicle-mounted unit (0201) relative to the service provider which is visual via graphical display of a map;

identifying a second wireless signal from said plurality of wireless signals in response to said second identification code (see col. 28, lines 16-25; col. 14, lines 37-39; col. 11, lines 17-35; col. 13, lines 7-17; col. 13, line 59 - col. 14, line 9; Figs. 15A-D); and

estimating a second distance and a second bearing in response to said second wireless signal, wherein said estimating a second distance includes calculating a distance between said tracking unit and said second target object. As a note, Takahashi further teaches of receiving a beacon (see col. 8, lines 13-16; col. 9, lines 22-25), where the service providers are varied based distance as provided by beacon signal (e.g., RSSI or strength). Takahashi does not specifically disclose having the feature estimating a second distance and a second bearing in response to at least partially on strength of said second wireless signal. However, the examiner maintains that the feature estimating a second distance and a second bearing in response to at least partially on strength of said second wireless signal was well known in the art, as taught by Azizi.

Azizi further discloses the feature estimating a second distance and a second bearing in response to at least partially on strength of said second wireless signal (see col. 3, lines 49-54; col. 4, lines 45-53; Figs. 1-2), where the tracking unit can track several target units. As a note, Azizi further discloses wherein said estimating a second distance includes calculating a distance between said tracking unit and said second target object (see col. 4, lines 45-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takahashi and Azizi to have the features estimating a first distance and a first bearing directly on strength and location of said first wireless signal source, in order to employ technology that combines the capability of

determining accurately both the distance and the direction of an individual or object being monitored relative to the transmission or monitoring point, and achieve this at a relatively low cost, as taught by Azizi (see col. 2, lines 3-9).

Regarding **claims 34 and 54**, the combination of Takahashi and Azizi discloses every limitation claimed, as applied above (see claim 33), in addition Takahashi further discloses the method of claim 33, further comprising:

mapping said first distance, said second distance, said first bearing and said second bearing into graphically displayable data showing relative locations between said tracking unit, said first object and said second object (see col. 28, lines 16-25; col. 14, lines 37-39; col. 11, lines 17-35; col. 13, lines 7-17; col. 13, line 59 - col. 14, line 9; Figs. 15A-D); and

displaying said relative locations on a display (see col. 14, lines 37-39; col. 20, lines 36-57; Figs. 15C-D), where the navigation system displays the mapping information in which the bearing would be inherent as evidenced by the fact that one of ordinary skill in the art would clearly recognize.

Regarding **claims 35 and 55**, the combination of Takahashi and Azizi discloses every limitation claimed, as applied above (see claim 30), in addition Takahashi further discloses the method of claim 30, wherein said receiving a first identification code representing a first target object from a code input device further includes accepting said first identification code from a user (see col. 11, lines 36-42; col. 8, lines 29-35; Figs. 1, 3-7, and 15A-D).

Regarding **claim 36**, the combination of Takahashi and Azizi discloses every limitation claimed, as applied above (see claim 30), in addition Takahashi further discloses the method of claim 30, wherein said tracking units is pre-loaded with a plurality of

classification codes and specific target codes, wherein every object belongs to at least one of said classification codes, wherein said specific target codes are assigned based on a set of predetermined criteria (e.g., services) (see col. 10, lines 24-39; col. 13, lines 6-11; col. 14, lines 54-60; Figs. 4 and 15A-D), where the service providers are in categories based on the service provided.

Regarding **claim 37**, Takahashi discloses the method of claim 30, in which said wireless signal (e.g., information item via beacon) broadcasted from a target unit (0514) located on said target object is adapted to vary its frequency of transmission based on predetermined criteria (see col. 11, lines 48-59; Figs. 1-2,8-9), where the system has information transmission and reception control unit (0514, 0106) that is a target to provide information of the service provider;

in which said tracking unit (0201) is adapted to broadcast an information item (e.g., via beacon) which reads on the claimed "wake-up signal" (see col. 11, lines 48-59; Figs. 1-2,8-9), where the system has information transmission and reception control unit (0514, 0106) that is a target to provide information of the service provider, and

in which said target unit (0514), upon receiving said wake-up signal, is adapted to broadcast said predetermined signal (see col. 11, lines 48-59; Figs. 5 and 15A-D), where the target unit (0514) provides information of services. Takahashi does not specifically disclose having the feature in which said target unit is adapted to vary its frequency of transmission based on predetermined criteria. However, the examiner maintains that the feature in which said target unit is adapted to vary its frequency of transmission based on predetermined criteria was well known in the art, as taught by Azizi.

Azizi further discloses the feature in which said target unit is adapted to vary its frequency of transmission based on predetermined criteria (see col. 4, lines 32-41, 45-53; col. 3, lines 35-55; Fig. 1). Also, Azizi further supports said tracking unit is adapted to broadcast a wake-up signal (see col. 4, lines 30-41); and said target unit, upon receiving said wake-up signal, is adapted to broadcast said predetermined signal (see col. 4, lines 45-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takahashi and Azizi to have the feature in which said target unit is adapted to vary its frequency of transmission based on predetermined criteria, in order to employ technology that combines the capability of determining accurately both the distance and the direction of an individual or object being monitored relative to the transmission or monitoring point, and achieve this at a relatively low cost, as taught by Azizi (see col. 2, lines 3-9).

Regarding **claim 38**, the combination of Takahashi and Azizi discloses every limitation claimed, as applied above (see claim 30), in addition Takahashi further discloses the method of claim 30, wherein said identifying a first wireless signal from said plurality of wireless signals further includes comparing every identification in said plurality of wireless signals with said first identification code (see Figs. 4 and 15A-D).

Regarding **claim 39**, Takahashi discloses the method of claim 30, wherein said estimating a first distance and a first bearing in response to said first wireless signal further includes calculating signal of said first wireless signal in response to said predefined range (see Figs. 4 and 15A-D). Takahashi does not specifically disclose having the feature estimating a first distance and a first bearing in response to at least partially on strength of

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said first wireless signal further includes calculating signal strength of said first wireless signal in response to said predefined range. However, the examiner maintains that the feature estimating a first distance and a first bearing in response to at least partially on strength of said first wireless signal further includes calculating signal strength of said first wireless signal in response to said predefined range was well known in the art, as taught by Azizi.

Azizi further discloses the feature estimating a second distance and a second bearing in response to at least partially on strength of said second wireless signal (see col. 3, lines 49-54; col. 4, lines 45-53; Figs. 1-2), where the tracking unit can track several target units.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takahashi and Azizi to have the feature estimating a first distance and a first bearing in response to at least partially on strength of said first wireless signal further includes calculating signal strength of said first wireless signal in response to said predefined range, in order to employ technology that combines the capability of determining accurately both the distance and the direction of an individual or object being monitored relative to the transmission or monitoring point, and achieve this at a relatively low cost, as taught by Azizi (see col. 2, lines 3-9).

Regarding **claim 40**, the combination of Takahashi and Azizi discloses every limitation claimed, as applied above (see claim 30), in addition Takahashi further discloses the method of claim 37, wherein said target unit is adapted to transmit a signal carrying a plurality of codes, each code being representative of a predetermined target object (see col. 10, lines 15-39; Figs. 1, 3-7, and 15A-D).

Regarding **claim 42**, the combination of Takahashi and Azizi discloses every limitation claimed, as applied above (see claim 41), in addition Takahashi further discloses the system of claim 41, wherein a target unit (e.g., 0514, 0106) in said target object (0101, 0301) is adapted to broadcast a target signal comprising a plurality strings (0401) of descriptive codes (1412), each of said strings identifying at least one of a plurality of target object (0101, 0301) (see Figs. 1, 3-7, 15A-D).

Regarding **claim 56**, the combination of Takahashi and Azizi discloses every limitation claimed, as applied above (see claim 50), in addition Takahashi further discloses the apparatus of claim 50, wherein said means for receiving a first identification code representing a first target object further includes means for monitoring (e.g., display) whether said first target object is a moving object or a fixed object (see Figs. 4 and 15A-D).

Regarding **claim 57**, the combination of Takahashi and Azizi discloses every limitation claimed, as applied above (see claim 41), in addition Takahashi further discloses the apparatus of claim 41, wherein at least one of said wireless signal combines a target code (1412) with live messages, said live messages adapted to be displayed by said tracking unit (0201) to show information provided by a target unit (0101) associated with said target code (1412) (see col. 14, lines 22-26; col. 15, lines 38-45; col. 15, line 60 - col. 16, line 5; Figs. 2, 4, 6-7).

Claims 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Takahashi et al.** (hereafter Takahashi) (US 6,097,313) in view of **Azizi et al.** (hereinafter Azizi) (US 5,525,967) as applied to claim 50 above, and further in view of **Meadows et al.** (hereinafter Meadows) (US 6,716,101 B1).

Regarding **claim 51**, the combination of Takahashi and Azizi every limitation claimed, as applied above (see claim 50), in addition Takahashi further discloses the apparatus of claim 50, wherein at least one of said target unit (e.g., 0514, 0106) is deployed in a local fixed signal site (hereinafter "LFS") to represent a plurality of target locations (0101) (see Figs. 1, 3, 5-7),

wherein said LFS (0104) is programmed to store said relative location information about its represented target locations (0101) and to send multiple signals to represent all those target locations (0101) (see col. 10, lines 19-32; col. 11, lines 34-44; Figs. 1, 3, 5-7),

wherein when one signal matches said target code which said tracking unit (0201) entered (see col. 14, lines 38-39, 54-62; col. 15, lines 20-45; Fig. 1, 3-7, 15B-D),

said tracking unit (0201) display the bearing and distance between said tracking unit and the target location (0101) (see Figs. 15A-D). The combination of Takahashi and Azizi does not specifically disclose having the feature said tracking unit triangulate. However, the examiner maintains that the feature said tracking unit triangulate was well known in the art, as taught by Meadows.

In the same field of endeavor, Meadows discloses the feature said tracking unit triangulate (see col. 4, lines 40-51), where the system uses a positioning technique such as triangulation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Takahashi, Azizi, and Meadows to have the feature said tracking unit triangulate, in order to track the location of wireless devices, as taught by Meadows (see col. 3, lines 42-43).

Regarding **claim 52**, the combination of Takahashi, Azizi, and Meadows discloses every limitation claimed, as applied above (see claim 51), in addition Takahashi further discloses the system of claim 51, wherein a plurality of LFS's (0106) are installed and networked together to represent a plurality of communication regions (P1) which reads on the claimed "cell regions" (see col. 14, lines 38-39; Figs. 1, 3, 5-7), where the navigation system provides mapping information,

wherein said tracking unit (0201) is two way communication with said LFS and directed to a target location which is not in a first cell region by using hand-off by one a first LFS to a second LFS from a first cell region to a second cell region (see Figs. 1, 3, 5-7, and 15A-D), where the vehicle (0108) moves between communication regions (P1-3),

such that said tracking unit (0201) uses said networked LFS's (0106) to navigate all location where this networked LFS (0106) is deployed (see col. 14, lines 38-39; Figs. 1, 3, 5-7, 15C-D), where the navigation system provides mapping information.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 30, 41, and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by **Azizi et al.** (hereinafter Azizi) (US 5,525,967).

Regarding **claims 30, 41, and 50**, Azizi discloses an apparatus, a tracking unit, and a method of finding a target object utilizing a tracking unit (see abstract; Figs. 1-2), comprising:

receiving a first identification code which said tracking unit pre-selected to represent a first target object, wherein said first identification code is a unique code utilized to identify said first target object (see col. 4, lines 45-53; Figs. 1-2);

receiving a plurality of wireless signals broadcasted from a plurality of objects within a predefined range, wherein said plurality of wireless signals are repeatedly broadcasted over a predetermined time frame within said predefined range (see col. 3, lines 49-55; col. 4, lines 45-53; Figs. 1-2);

identifying a first wireless signal from said plurality of wireless signals in response to said first identification code (see col. 4, lines 45-53; Figs. 1-2); and

estimating a first distance and a first bearing directly on strength and location of said first wireless signal source, wherein said estimating a first distance includes calculating a distance between said tracking unit and said first target object (see col. 4, lines 45-53; Figs. 1-2).

Claims 30, 41, and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by **Creek et al.** (hereinafter Creek) (**US 5,771,002**).

Regarding **claims 30, 41, and 50**, Creek discloses an apparatus, a tracking unit, and a method of finding a target object utilizing a tracking unit (see abstract; Figs. 1-11), comprising:

receiving a first identification code which said tracking unit pre-selected to represent a first target object, wherein said first identification code is a unique code utilized to identify said first target object (see abstract; Figs. 1-11);

receiving a plurality of wireless signals broadcasted from a plurality of objects within a predefined range, wherein said plurality of wireless signals are repeatedly broadcasted over a predetermined time frame within said predefined range (see abstract; Figs. 1-11);

identifying a first wireless signal from said plurality of wireless signals in response to said first identification code (see abstract; Figs. 1-11); and

estimating a first distance and a first bearing directly on strength and location of said first wireless signal source, wherein said estimating a first distance includes calculating a distance between said tracking unit and said first target object (see abstract; Figs. 1-11).

Response to Arguments

9. Applicant's arguments with respect to claims 30-58 have been considered but are moot in view of the new ground(s) of rejection necessitated by the new limitations and claims.

In response to applicant's arguments, the Examiner respectfully disagrees as the applied reference(s) provide more than adequate support and to further clarify (see the above claims for relevant citations and the comments in this section).

10. In view of item 3 above, a rejection would be applicable such as the following:

Regarding **claim 58**, the combination of Takahashi and Azizi discloses every limitation claimed, as applied above (see claim 41), in addition Takahashi further discloses the method of claim 30, 41, 50, wherein said identification code comprises at least one of the following:

- at least one classification code (see Figs. 4 and 15A-D);
- at least one descriptive code (see Figs. 4 and 15A-D);
- at least one specific location code (see Figs. 4 and 15A-D);
- at least one business name code (see Figs. 4 and 15A-D).

11. The Examiner requests applicant to provide support for the amended claim language and any further amended claim language.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Maruyama et al. (US 6,748,317 B2) discloses a portable terminal with the function of walking navigation.
- b. Panasik (US 6,587,689 B1) discloses a multi-sensor assisted cellular handoff technique.
- c. Nelson (US 6,935,958 B2) discloses a method and apparatus for machine location.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (571) 272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WJD,JR/

WJD,JR
11 March 2007



CHARLES N. APPIAH
SUPERVISORY PATENT EXAMINER